- 1. (Currently Amended) A system for making a biochemical assay of each of a plurality of provided specimens, the system comprising:
- a. a plurality of receptacles, each receptacle for containing a respective specimen of the plurality of specimens, each receptacle comprising a surface for binding a paramagnetic particle to the surface;
- b. a detector for providing a resistance responsive to paramagnetic particle proximity to the detector in accordance with a giant magnetoresistive effect;
- c. a mechanism for positioning each respective surface in working proximity to the detector for providing a respective resistance; [and]
- d. a controller for controlling the mechanism and for recording indicia of each respective resistance;[.]

wherein said detector comprises a multiplicity of physically defined active areas for independent detecting of each of a corresponding multiplicity of specimens of the plurality of specimens;

each active area comprises a plurality of sensors, each sensor comprising an independent resistance responsive to paramagnetic particle proximity to the respective sensor in accordance with a respective giant magnetoresistive effect; and said controller further records indicia of resistance of each sensor.

- 2. (Original) The system of claim 1 wherein a motion of a respective receptacle is substantially stopped while the respective resistance is provided by the detector.
  - 3. (Cancelled)
  - 4. (Cancelled)
  - 5. (Currently Amended) The system of claim [4] 1 wherein:
- a. the detector comprises for each active area an integrated circuit comprising the plurality of sensors and a serial interface; and

- b. the controller is coupled to each serial interface for receiving indicia of resistance.
- 6. (Currently Amended) The system of claim [3]  $\underline{1}$  wherein each respective active area is aligned below a respective specimen.
- 7. (Original) The system of claim 6 wherein a distance between a surface and an active area is reduced by operation of an atmospheric pressure above the surface.
- 8. (Currently Amended) The system of claim [3]  $\underline{1}$  wherein the mechanism comprises:
- a. a disk for holding the plurality of specimens, the disk having a face and having an axis of rotation perpendicular to the face; and
- b. a motor for rotating the disk about the axis to position a respective specimen held by the disk in working proximity to the detector.
- 9. (Original) The system of claim 8 wherein each receptacle is integral to the disk.
- 10. (Currently Amended) The system of claim [3] <u>1</u> wherein the mechanism comprises:
- a. a base for holding the plurality of specimens, the tray having a plurality of rows; and
- b. a motor for positioning a respective specimen held by the base in working proximity to the detector.
- 11. (Original) The system of claim 1 wherein the mechanism moves the detector.
- 12. (Currently Amended) The system of claim [4]  $\underline{1}$  wherein said receptacle is discarded and said sensor reused.

- 13. (Original) The system of claim 1 further comprising a console for operator controls, displays, and data processing, and a chemical analysis unit for performing said biochemical assay.
- 14. (Original) The system of claim 1 wherein said receptacles are placed in specimen trays which facilitate mechanical protection, identification, preparation, storage, handling and disposal of multiple specimen carriers.